

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: **Tadayuki KAMEYAMA et al.**

Group Art Unit: **1792**

Application Number: **10/522,618**

Examiner: **Nathan H. EMPIE**

Filed: **January 31, 2005**

Confirmation Number: **6711**

For: **METHOD OF PRODUCING POLARIZING FILM, POLARIZING
FILM PRODUCED BY THE METHOD AND OPTICAL FILM**

Attorney Docket Number: **052009**

Customer Number: **38834**

DECLARATION UNDER 37 C.F.R. 1.132

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Manabu Miyazaki, a citizen of JAPAN, hereby declare and state unequivocally:

1. I am currently employed in the Development Section 4 of the Development Department of the Optical Related Division in Nitto Denko Corporation. I joined Nitto Denko Corporation in April 2006.

2. I received a master's degree in Osaka University, Graduate School of Engineering Science in 2006.

3. The following experiments and evaluations were performed by me or under my supervision and review, and are reported in the attached Table. The attached Table shows these additional experimental results together with experimental results reported in the

specification of the present application.

4. Polarizing plates were produced in the same way as in Example 1 in the specification of the above-identified application except for using the conditions in the attached table. The display unevenness of the obtained polarizing plates was evaluated by the method of the present application for evaluating display unevenness, by illuminating one sample of each example of the polarizing plates using a backlight, and observing the polarizing plates from a front direction, except that a backlight E was used instead of backlights A-D, and three evaluations were made instead of a single evaluation.

5. A backlight E was used instead of the backlights A- D of the present application, because the backlights A- D are of an old type at a time of filing of the present application (i.e., in 2002), so that they are currently unavailable. The backlight E, which is currently available, is of the same type as that of the backlight A. In order to facilitate the comparison between the data obtained using the backlight A (data in the specification of the present application) and the data obtained using the backlight E (current additional data), an additional evaluation was made for the polarizing plates of Example 1 and Comparative Example of the present application using the backlight E. As shown in the additional evaluations of the polarizing plates of Example 1 and Comparative Example 1, the

evaluation of display unevenness using the backlight E is slightly degraded, compared with that obtained using the backlight A, because the brightness of the backlight E has enhanced compared with that of the backlight A.

6. Three evaluations were made of each sample by three evaluators instead of a single evaluation. Thus, in the case where the evaluations are divided into "6", "6", and "7", an average value "6.3" is used as an evaluation.

7. As shown in the Table, the conditions in Example 1 and Additional Examples 1 and 2 are the same except for the temperature of a swelling bath of 25, 32, and 42°C, respectively. The evaluation of the display unevenness is 6.3 in Example 1, 6.7 in Additional Example 1, and 6.7 in Additional Example 2, which are substantially the same. Thus, it is understood that the evaluation of display unevenness is satisfactory for varying swelling bath temperatures.

8. Furthermore, the conditions in Example 3 and Additional Example 3 are the same except for the period (b) of 110 and 75 seconds, respectively. The evaluation of display unevenness is 7 in Example 3 and 6.3 in Additional Example 3, which are substantially the same. Thus, it is understood that the evaluation of display unevenness is satisfactory for varying periods (b) within the scope of the claims in the present application.

9. The conditions in Example 8 and Additional Example 2 are the same except for the period (a) of 6 and 3.5 seconds, respectively. The evaluation of display unevenness is 7 in Example 8 and 6.7 in Additional Example 2, which are substantially the same. Thus, it is understood that the evaluation of display unevenness is satisfactory for varying periods (a) within the scope of the claims in the present application.

10. Furthermore, the conditions in Example 1 and Additional Example 4 are the same except for the stretch ratio in a swelling bath of 2.5 and 1.9, respectively. The evaluation of display unevenness is 6.3 in Example 1 and 6 in Additional Example 4, which are substantially the same. Thus, it is understood that the evaluation of display unevenness is satisfactory for varying stretch ratios, i.e., the stretch ratio in a swelling bath hardly influences the evaluation of display unevenness.

11. Turning to the Comparative Examples, the conditions in Additional Example 3 and Comparative Example 1 are the same except for the period (a) of 11 seconds and 14 seconds, respectively. The evaluation of display unevenness is 6.3 in Additional Example 3 and 4 in Comparative Example 1. Thus, a remarkable difference can be confirmed therebetween. Accordingly, it is understood that the period (a) brings about a remarkable difference in effects between the inside and the outside of the scope of the claims.

Declaration Under 37 C.F.R. 1.132
U.S. Appl No. 10/522,618
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The undersigned declares that all statements made herein of his/her own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: April 20. 2009

Signature: Manabu Miyazaki
Manabu Miyazaki

Encl.: Data table

Data table

	Temper- ature of swelling bath	Stretch ratio in swelling bath	Stretch ratio in dye bath	Period (a) : period from time when film comes into contact with solvent of swelling bath to time before film comes into contact with first guide roll	Period (b): period from time when film comes into contact with first guide roll to time when film comes into contact with second guide roll	Period during which film is soaked in swelling bath	Evaluation of display unevenness	
							Additional data	Data in specification
Example 1	23°C	2.5 times	6 times of raw film	3.5 seconds	60 seconds	92 seconds	6.3	7
Example 2	25°C	2.5 times	6 times of raw film	2 seconds	35 seconds	63 seconds	-	7
Example 3	25°C	2.5 times	6 times of raw film	11 seconds	110 seconds	130 seconds	-	7
Example 5	32°C	1.9 times	6 times of raw film	5 seconds	77 seconds	121 seconds	-	7
Example 6	32°C	1.9 times	6 times of raw film	11 seconds	110 seconds	128 seconds	-	6
Example 7	32°C	2.1 times	2.9 times of raw film	2 seconds	35 seconds	63 seconds	-	7
Example 8	42°C	2.5 times	6 times of raw film	6 seconds	60 seconds	95 seconds	-	7
Additional Example 1	32°C	2.5 times	6 times of raw film	3.5 seconds	60 seconds	92 seconds	6.7	-
Additional Example 2	42°C	2.5 times	6 times of raw film	3.5 seconds	60 seconds	92 seconds	6.7	-
Additional Example 3	25°C	2.5 times	6 times of raw film	11 seconds	75 seconds	94 seconds	6.3	-
Additional Example 4	25°C	1.9 times	6 times of raw film	3.5 seconds	60 seconds	92 seconds	6	-
Comparative Example 1	25°C	2.5 times	6 times of raw film	14 seconds	75 seconds	94 seconds	4	4
Comparative Example 2	25°C	2.5 times	6 times of raw film	0.3 seconds	4 seconds	15 seconds	-	3
Comparative Example 5	32°C	2.8 times	3.5 times of raw film	15 seconds	5 seconds	21 seconds	-	3

*Examples 4, 9 and Comparative Examples 3, 4 are excluded since they exemplify the case of using one guide roll